# Edge2 V7 Release Note 2024/11/07 Corrected document v1.2





# **EARTHBRAIN** Edge2 v7 Update item (Scheduled to be released on Oct. 23)

Application	Development items	Contents/Use case	UI Image
	Changed "Vertical Accuracy Check" function settings	In the "Vertical accuracy verification" function, the radius of the point cloud search area can now be set up to 40 cm in 5 cm increments.	Ρ4
	Changed LED indicators when using the base station and drone base simultaneously	Changed the way the LEDs indicate when a base station, drone base, or both are being used simultaneously to make it easier to visually determine which mode is being used.	Ρ5
lew feature <sup>P</sup> erformance nprovement	(.tfw file) output	World files (.tfw file) can now be output during ortho image output.	Ρ6
	Read drone images via USB, export via SD card	Drone images, control point data, etc. can now be written and read via USB/SD.	P7
	Warning LEDs of battery low	The new UI now makes it easier to see when the battery is low, and the threshold for the LED warning has been adjusted.	P8
	GNSS Mask Angle Adjustment	The mask angle setting angle can now be changed in 1-degree increments from 0-30 degrees.	
	Error reporting for self-position misalignment	It is now possible to report an error if the XY coordinates of the self-position are significantly off when PPK logging starts.	P10
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# **EARTHBRAIN** Edge2 v7 Update item (Scheduled to be released on Oct. 23)

Application	Development items	Contents/Use case	UI Image
	Make software updates a single step.	Compatible with V7 or later. Even after OS updates, a single reboot completes the update.	No
	Added an icon to allow users to initiate updates at their discretion	OTA will not automatically download the update but will notify the user when an update is available, allowing the user to initiate the download	No
New feature	Reset function	A restart icon has been added to enable restarting	P11
<sup>o</sup> erformance nprovement	CMR support	CMR delivery is now supported for base station digital radio transmission	No
	Software update via USB memory stick	Enables seamless updates in areas with poor network conditions. We are currently unable to provide update files on the support site due to their large size. If you need the update file, please contact our support center.	No
	Display Projet time in local time	Remove time display for some projects	No
	Specific Android Tablet Support	Galaxy Tab Active4 Pro (model name SM-T630) is now supported.	No
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# <sup>\*</sup> EARTHBRAIN</sup> Change "Vertical Accuracy Check" function settings 4

In the "Vertical accuracy verification" function, the radius of the point cloud search area can now be set up to 40 cm in 5 cm increments.



EARTHBRAIN Changed LED indicators when using the base station and drone base simultaneously

We apologize for any inconvenience caused and would like to correct an error in the previous release notes.

The LED indications for base station delivery, drone base use, and simultaneous use after v7 are as follows.

#### Base station broadcasting only

Green flashing clockwise viewed from the top of the Edge

#### Drone-based PPK logging only

Green flashing counterclockwise when viewed from top of Edge

#### When Base station broadcasting and drone base are used simultaneously

Same green blinking (no rotating blinking) as up to v6







#### World file export specifications

File type	File name
pointcloud	20230922T064140Z_pointcloud_wgs84.las
pointcloud_removed	20230922T064140Z_pointcloud_removed_wgs84.las
orthophoto	20230922T064140Z_orthophoto_wgs84.tif
World file	20230922T064140Z_orthophoto_wgs84.tfw
DSM	20230922T064140Z_dsm_wgs84.tif
DTM	20230922T064140Z_dtm_wgs84.tif

No changes to the UI: If an ortho has been generated, (.tfw file) will be automatically output.

Exporting data       Point cloud data       Accuracy check report       3D accuracy check report         Exporting data       Point cloud data       Accuracy check report       3D accuracy check report         Coordinate System to Transform       WGS84       •         Point cloud format       LAS       •         Select the point cloud to be copied.       Select the point cloud 2024-7-1       Incomplete         Point Cloud 2024-7-2       Complete       Incomplete         Bit 2024-8-8       Incomplete       Incomplete		Mihama den EPSG: WGS 84	סר	<b>Ø</b> 1	Project informatic
Exporting data     Point cloud data     Accuracy check report     3D accuracy check report       Coordinate System to Transform     WGS84     •       Point cloud format     LAS     •       Select the point cloud to be copied.     Generated data     Vertical accuracy check       @ ### 2024-7-1     Incomplete     Incomplete       @ Point cloud 2024-7-2     Complete     Complete	Exporting destination		USB memory	SD card	
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Point cloud format     LAS       Select the point cloud to be copied.       Generated data     Vertical accuracy check     3D accuracy check	Coordinate System to Transfo	rm	WG584	*	
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	□ 古群 2024-8-9		Incomplete	Complete	

### **K** EARTHBRAIN Read drone images via USB, export via SD card.



The new UI now makes it easier to see when the battery is low, and the threshold for the LED warning has been adjusted.

### **Status Bar**



The color of the battery icon changes when the remaining battery charge falls

below the specified level.

# **GNSS Mask Angle Adjustment**

The mask angle setting angle can now be changed in 1-degree increments from 0-30 degrees.

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### **EARTHBRAIN** Error reporting for self-position misalignment

It is now possible to report an error if the XY coordinates of the self-position are significantly off when PPK logging starts.

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# **Reset function**

#### A restart icon has been added to enable restarting



#### **Background: Defects Related to Battery Charging**

There have been several instances where the battery could not be recharged. To address this, we will update the battery control microcontroller. The upgrade process will proceed as follows:

1. The application will be downloaded as usual.

2.After the download is complete (indicated by an orange arrow), please turn the power OFF and then ON.

3. The OS download will begin.

 Once the OS download is complete, a pop-up windowwill appear on the right.

4.When the AC adapter is connected and the restart button is pressed, the red LED on the 4-way indicator will light up temporarily. Please wait for the process to finish.

• When the power turns off, restart as usual to complete the update.

#### **Important Notes:**

•If AC power is not connected during step 4, please turn the power off and on as usual. However, the sub-microcontroller will not be updated in this case.

•The sub-microcontroller update will occur when the power is turned off after AC power has been connected while the device is on.





# Edge2 v7 Update Procedure

Update Procedure

■v7 OTA名称: "7.7.0(RC1), 7.7.1(RC1 update)" FW VERSION: "7.7.0(RC1), 7.7.1(RC1 update)" OS VERSION: "4.2.1"

\* We recommend updating the IPAD operating system to IOS 17.6 or higher.

(1) Turn on the Edge 2 and make sure you are online on the Internet with the I-pad. Wired LAN is recommended since the data size may be up to a gigabyte.

(2) Please wait for the application to finish downloading.

In a good network environment, such as a wired LAN connection, it will take approximately 30 minutes.

- For LTE, it may take 1 hour or more.
- By good internet connection, we mean a downstream speed of around 50Mbps.
- If the internet connection is poor, the update may take around 3 to 4 hours, and in some cases, considerably longer.



### Edge2 v7 Update Procedure

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(3) Turn power off/on

Check the Firmware version. Go to the Settings screen -> SMART CONSTRUCTION Edge Device information, Confirm that the version is "7.7.1". If not, start over from (1). If it is, proceed to (4).

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	SU_VERSION	4.0.0- Orelease				
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	PM_VERSION	2.2.0- Orelease				
	EU_VERSION	4.5.0- Orelease				
	VU_VERSION	4-PPK_upload.1.0-dis-				



# Edge2 v7 Update Procedure

(4) Please wait for the OS to finish downloading.In a good network environment 15 minutes for wired LAN connection, etc.; 30 minutes or more for LTE, etc.

(5) Turn power OFF/ON

Check the OS version. Go to the Settings screen -> SMART CONSTRUCTION Edge Device information, Confirm that the version is "4. 2. 1". If not, start over from (4). If the OS Ver is confirmed, you are done!

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